

CLAIMS

1.- Multi-perforated collagen film, provided on rolls or in the form of sheets, for use as a food wrapping in food industry, comprising perforations by means of laser of substantially circular shape with an average ellipticity of less than 0,17 and the holes being spaced with respect to their nearest neighbours by 3 mm to 14 mm, thus allowing the escape of air or steam trapped between the film and the food wrapped into said film, and said film still having sufficient mechanical strength and extensibility to be able to stand the food processing steps in the manufacture of cooked ham or in comparable operations under industrial conditions.

2.- Multi-perforated collagen film according to claim 1, having both in machine and in transverse direction an extensibility of equal or more than 22 %.

3.- Multi-perforated collagen film according to claim 1 , having both in machine and in transverse direction a tensile strength of equal or more than 21 N/mm².

4.- Multi-perforated collagen film according to claim 1 , the perfectly circular perforations of which having average diameters higher than 300 µm and equal or lower than 800 µm and the perforations deviating from perfectly circular shape having, in average, longest diameters between more than 300 µm and less than 800 µm.

5.- Multi-perforated collagen film according to claim 1 , having a basis weight between 20 g/m² and 40 g/m² at a water content of 11% to 15 % based on weight.

6.- Multi-perforated collagen film according to claim 1, having perforations which are irregularly arranged

5 7.- Multi-perforated collagen film according to claim 1, having non-perforated margins with a width between 2cm and 8 cm.

8.- Multi-perforated collagen film according to claim 1, having a pH between 2,6 and 8,0.

10 9.-Multi-perforated collagen film according to claim 1, having a pH between 3,5 and 6,0.

10.- Multi-perforated collagen film according to claim 1, being coloured black.

15 11.- Multi-perforated collagen film according to claim 1, being caramel coloured.

20 12.- A method of perforating a flat film based on collagen according to claim 1, comprising the use of a Laser.

13.- A method of perforating a flat film based on collagen according to claim 1, comprising the use of a CO₂-Laser.

25 14.- A method of perforating a flat film based on collagen according to claim 12, adjusting the experimental set-up such that the resulting perforations have an average ellipticity of less than 0,17.

30 15.- A method of perforating a flat film based on collagen according to claim 12, adjusting the experimental set-up such that the perforation process provides either perfectly circular perforations having average diameters higher

than 300 μm and equal or lower than 800 μm and/or perforations deviating from perfectly circular shape having, in average, longest diameters between more than 300 μm and less than 800 μm .

5 16.- A method of perforating a flat film based on collagen according to claim 12, adjusting the experimental set-up such that the perforation process provides irregularly arranged perforations.

10 17.- A method of perforating a flat film based on collagen according to claim 12, executing said perforation in a continuous way.

18.- A method of wrapping and netting a foodstuff comprising the following steps:

- 15 • loading a roll of perforated flat collagen film according to claim 1 onto an applicator device, equipped with an elastic net,
- stuffing the foodstuff into the perforated collagen film and, at the same time, netting the resulting wrapped foodstuff with an elastic net, while, in parallel, substantially all air initially trapped between the film and the foodstuff escapes through the perforations...
- 20 • closing one or both ends of the elastic net with a clip or by tying.

19.- A method of wrapping and netting a foodstuff comprising the following steps:

- 25 • extending a sheet of perforated flat collagen film according to claim 1
- placing the foodstuff onto the film thus prepared
- wrapping the perforated collagen film round the foodstuff
- passing the intermediate product thus prepared through a
- 30 net applicator to introduce it into an elastic net

- closing one or both ends of the elastic net with a clip or by tying

20.- A cooked or non-cooked netted product coated with a multi-
5 perforated collagen film according to claim 1.